



BOROUGH OF BILSTON

ANNUAL REPORT

of the

Medical Officer of Health

FOR THE YEAR

1963

J. P. NEYLON, M.B., B.Ch., B.A.O., D.P.H., D.C.H., L.M.

Medical Officer of Health

Health Department
23, Wellington Road
Bilston

Tel. 41451

*To the Mayor, Aldermen and Councillors of the
Borough of Bilston.*

MR. MAYOR, MADAM AND GENTLEMEN,

I present herewith my Annual Report for 1963.

FOREWORD

"Some books are to be tasted, others to be swallowed, and some few to be chewed and digested; that is, some books are to be read only in parts; others to be read but not curiously; and some few to be read wholly, and with diligence and attention. Some books also may be read by deputy, and extracts made of them by others".—Essays, 50. Of Studies.

Francis Bacon (1561—1626).

As year follows year the ideal of an Annual Report, which is both factual and readable becomes more difficult to attain. The more facts and figures crammed into a report the less readable it becomes and less pleasurable in its compilation. Despite the fact that the Annual Report of the Medical Officer of Health is basically a factual, Statutory Document, deriving its legal authority from Article 17 (5) of the Sanitary Officers (Outside London) Regulations, 1935, it should also be readable, as these Reports have now come to be regarded as important instruments of Health Education. Reports cannot be readable without appropriate comment and suitable expression of opinion.

Retrospective examination of the year under review, shows by and large a satisfactory overall picture of the Health of the Borough's population.

In part I the immunisation figures for Whooping Cough cannot be regarded with either complacency or satisfaction, as can be deduced from my comments further on in the body of the Report.

The Infant Mortality Rate, which is generally considered to be one of the most accurate indices of the Health Services of any given area, shows an infinitesimal increase. It is interesting to compare our figure with that of Harlow New Town and to consider carefully the opinion expressed by Lord Taylor as mentioned in Part II. Any increase in the Infant Mortality Rate is more than offset by the decline in the Stillbirth, Neo-Natal and Peri-Natal Rates.

In the field of Infectious Diseases the most outstanding feature was the absence of Diphtheria for the sixth and of Acute Anterior Poliomyelitis for the fourth successive years.

In Part IV of the Report the excellent progress in Slum Clearance and the erection of a greatly increased number of new municipal dwellings are noted—important factors in the improvement of the Health of the town.

“The condition upon which God hath given liberty to man is eternal vigilance; which condition if he break, servitude is at once the consequence of his crime, and the punishment of his guilt”.

—“Speech on the Right of Election of Lord Mayor of Dublin, 10 July, 1790”.
John Philpot Curran (1750—1817).

This quotation is most frequently misquoted, to the effect that, “Eternal vigilance is the price of freedom”. In no field of life is this more true, than where freedom from disease is obtained by eternal vigilance on the part of the Public Health Inspectors, in matters relating to the Sanitary Conditions of the Area which are dealt with in Part V. Such vigilance, now taken for granted by the community at large has resulted over the years in freedom from widespread infections and pestilences of the past. Perhaps only a very small group of individuals outside of those actively engaged in this dedicated work, realise the continuous and unobtrusive effort, that is being expended to achieve and maintain our present standards of health.

All efforts have been made in the preparation of this Report, to ensure that it complies with the various instructions contained in statutes and circulars from the appropriate Ministers.

It only therefore remains for me to thank the Mayor, Aldermen and Councillors for their help and courtesy during 1963 and the Chief Officers and Staffs of other Corporation Departments for helpful co-operation. In particular, I must thank the Chief Public Health Inspector, Mr. J. R. Tart, the Public Health Inspectors and the Clerical Staff of the Health Department for their willing help throughout the year and especially for their efforts in the compilation of this Annual Report. In conclusion, I extend my most sincere thanks to Alderman N. Bayliss, J.P., C.C., Chairman of the Health Committee for his ever ready sound advice and unfailing help during 1963.

I have the honour to be,

Your obedient servant,

J. P. Neylon.

Medical Officer of Health.

1st September, 1964.

PART I.

GENERAL PROVISION OF THE HEALTH SERVICES

*“The best doctors in the world are Doctor Diet,
Doctor Quiet, and Doctor Merryman”.*

—Polite Conversation. Dialogue 2.
Jonathan Swift (1667—1745).

A. SERVICES PROVIDED BY THE BOROUGH COUNCIL

HEALTH COMMITTEE AS AT 31ST DECEMBER, 1963.

Chairman: ALDERMAN N. BAYLISS, J.P., C.C.

Vice-Chairman: COUNCILLOR H. A. HUMPHRIES

THE MAYOR, ALDERMAN E. W. BOLD

ALDERMAN MISS A. FELLOWS

COUNCILLOR W. FELLOWS

ALDERMAN O. H. JONES, J.P.

COUNCILLOR G. HARRIES JONES, B.A.

ALDERMAN J. V. LAVENDER

COUNCILLOR J. LARKIN

COUNCILLOR A. BARRATT

COUNCILLOR A. W. PACE

COUNCILLOR G. C. BOLD

COUNCILLOR J. WALTON

COUNCILLOR R. CAMPBELL

COUNCILLOR A. E. WOOLLEY

COUNCILLOR E. H. COPEMAN

STAFF OF THE PUBLIC HEALTH DEPARTMENT

Medical Officer of Health :

J. P. NEYLON, M.B., B.Ch., B.A.O. (N.U.I.), D.P.H. (Leeds), D.C.H.
(R.C.P. and S.I.), L.M. (Rotunda)

Deputy Medical Officer of Health :

(Part Time)

W. BARRY, M.B., B.Ch., B.A.O. (N.U.I.)

Chief Public Health Inspector and Cleansing Superintendent :

J. R. TART, Cert. S.I.B., M.A.P.H.I.

Certificated Inspector of Meat and Other Foods

Senior Public Health Inspector :

T. C. MOSS, Cert. S.I.B., M.A.P.H.I.

Certificated Inspector of Meat and Other Foods

Additional Public Health Inspectors :

J. W. BARBER, Cert. S.I.B.

R. D. STIRLING, M.A.P.H.I.

W. A. BARTON, M.A.P.H.I.

Certificated Inspector of Meat and Other Foods

(Terminated 27.10.63)

Pupil Public Health Inspector :

B. HALES

Clerical Staff :

Health :

Miss R. P. SHEFFIELD

Miss R. CARTER (Terminated 28.5.63)

G. ILLIDGE

Miss C. BOTTERILL (Commenced 22.7.63)

Cleansing :

L. R. LITTLEWOOD (Part Time)

DUTIES OF THE SENIOR PUBLIC HEALTH OFFICERS

Medical Officer of Health

The duties are those laid down in the Public Health Acts of 1936 and 1961; the Local Government Act, 1933; The Housing Acts of 1957 and 1961; Factories Act, 1961; Food and Drugs Act, 1955; Clean Air Act, 1956, and the Orders and Regulations made thereunder, including in particular the Public Health Officers Regulations, 1959. Briefly these are:—

- (1) To inform himself of all matters likely to affect the health of the Borough and to advise the Council in such matters.
- (2) To inquire into the cause, origin and distribution of diseases.
- (3) To inquire into the cause and circumstances of any outbreak of dangerous infectious disease and to take all necessary steps to prevent the extension thereof.
- (4) To directly supervise the work of the Public Health Inspectors.
- (5) If necessary, to inspect and examine any animal or any article, unfit for human food, and if diseased or unfit for it to be seized and dealt with.
- (6) To inquire into any offensive trades carried out.
- (7) To inspect or cause to be inspected all food preparing premises, and to take all necessary steps to prevent any dangers to health in such premises.
- (8) To report to the Ministry of Health and other Ministries as required by them from time to time.
- (9) To make an Annual Report on the work of the Public Health Department and the health of the district.

Chief Public Health Inspector

The duties of the Chief Public Health Inspector are as detailed in Article 27 of the Sanitary Officers (Outside London) Regulations, 1935, and the Acts referred to below :—

- (1) To systematically inspect the district and to keep himself and the Medical Officer of Health informed of any nuisances that require abatement and of any other sanitary circumstances.
- (2) To periodically inspect all food preparing premises and to inform the Medical Officer of Health of any action thought necessary.
- (3) To act as officer of the Local Authority under the Prevention of Damage by Pests Act, 1949.

- (4) To act as the Local Authority's inspector under the Shops' Act, 1951, and Pet Animals Act, 1951.
- (5) To act as the Local Authority's Cleansing Superintendent; that is to supervise the collection and disposal of house and trade refuse.
- (6) To furnish the Medical Officer of Health with a tabular statement, giving the inspections made by him during the year, the notices served and the results of the service of such notices.

Senior Additional Public Health Inspector

The Senior Public Health Inspector acts as deputy for the Chief Public Health Inspector during his absence through any cause.

Influenza Vaccination

As in previous years Bilston Borough Council, once again offered its members and employees vaccination against influenza. Despite the fact that the efficacy of this procedure has been fully authenticated in many scientifically conducted and orthodox trials throughout the United Kingdom, including the Windmill girls, less than half of our members and employees availed of this opportunity.

B. GENERAL MEDICAL SERVICES

Eighteen medical practitioners acting in accordance with the National Health Service Act, 1946, provide general medical services for the Bilston community. A high level of co-operation and close liaison exists between the Health Department and the local practitioners.

C. HOSPITAL SERVICES

The Birmingham Regional Hospital Board is responsible for providing Hospital and Specialist services for Bilston residents. The hospitals mainly used are The Royal Hospital, Wolverhampton; New Cross Hospital, Wednesfield; The Women's Hospital, Wolverhampton; Moxley Infectious Diseases, Bilston; The Midland Counties Eye Infirmary, Wolverhampton; Parkfields and Prestwood Sanatoria and Burton Road Hospital, Dudley. All are helpful and co-operative in their dealings with the Health Department.

D. SERVICES OF THE LOCAL HEALTH AUTHORITY

School Health

The School Health Service in Bilston is the responsibility of the Staffordshire County Council. This is a very efficient service, which has well stood the test of time. Locally three full-time School Nurses, three part-time School Medical Officers and one full-time Dental Officer are engaged in this work.

Maternal Health

Normal domiciliary midwifery in the Borough is dealt with by four full-time midwives. Two Ante Natal clinics are held weekly in the Centre Health Clinic, Wellington Road. Each year a diminution in the number of home confinements is noted, while more and more women clamour to be confined in hospital. This is an unwholesome trend as the domiciliary confinement, provided there are no associated medical or obstetric complications, has many advantages over hospital deliveries. Firstly, the mother at home is in familiar surroundings and with known attendants in her local midwife and family doctor. Secondly, there is less likelihood of the infant contracting infection at home and hence a lower infant mortality rate. Thirdly, home confinements tend to ease the burden of overworked Hospital Obstetric Departments.

It is interesting to note that 25% of all confinements in Holland occur in hospital, 66% in Great Britain and 99% in the United States of America. Holland has a remarkably low Infant Mortality Rate, Great Britain much higher and the U.S.A. much higher still.

District Nursing Service

The value of this service is inestimable in keeping so many patients at home, who would otherwise have to be hospitalized, with consequent loss of much needed beds and further financial burden on the community. Four female and one male nurse are employed by the County Council in the Borough.

Ambulance Service

The County Service acting from its Tipton and Darlaston depots provide a very efficient service and cater adequately for the needs of Bilston residents.

Domestic Help Service

Each year there is a further demand for this excellent service.

Child Health

Three full-time Health Visitors are engaged in Infant Welfare. Clinics are held twice weekly at the Centre Health Clinic, Bilston, and twice monthly at the John Street Schools, Ettingshall. It is debatable whether these clinics in their present form are really necessary today, in the presence of a vigorous active comprehensive National Health Service. While nobody questions the sterling work done by Maternal and Infant Welfare clinics in pre-National Health days and their vital role in reducing Infant Mortality Rates, it would appear that they might now be utilised in a different manner. In a recent debate in the House of Lords, that eminent man of medicine, Lord Taylor, referred to the fact that Harlow New Town has achieved an Infant Mortality Rate of 9.3. The Infant Mortality

Rate for England and Wales in 1963 was 21.1 an all time low National Record. Lord Taylor attributes the remarkable rate of 9.3 to the complete integration of General Practitioners and Maternal and Child Welfare Clinics. He also considers that what has been accomplished at Harlow could also be accomplished elsewhere, at one twentieth of the cost of providing new hospitals.

Laboratory Facilities

General Practitioners and the Health Department make every use of the facilities provided by the Public Health Laboratory Service based in Stafford. The Director, Dr. E. Mackay-Scollay, and his staff have always been most helpful in advising on any bacteriological problems, with which the Health Department have been confronted from time to time.

Vaccination

The Smallpox vaccination figures for 1963 are as follows.

<i>Initial Vaccination</i>				<i>Males</i>	<i>Females</i>
Under 15 years	..	..		30	35
15 years and over	..	..		4	10
<i>Re-vaccination</i>					
Under 15 years	..	..		2	2
15 years and over	..	..		11	12

These figures show a marked reduction over the returns for 1962, which was a year of exceptionally high vaccination rates, owing to the occurrence of two cases of Smallpox in the Midlands.

The figures for that year were.

<i>Initial Vaccination</i>				<i>Males</i>	<i>Females</i>
Under 15 years	..	..		397	388
15 years and over	..	..		287	409
<i>Re-vaccination</i>					
Under 15 years	..	..		35	46
15 years and over	..	..		968	734

But the 1963 figures are down also in comparison with 1961. This is especially marked in the case of initial vaccinations as will be noted from the following.

Vaccination Returns 1961

<i>Initial Vaccination</i>				<i>Males</i>	<i>Females</i>
Under 15 years	..	..		47	62
15 years and over	..	..		8	2
<i>Re-vaccination</i>					
Under 15 years	..	..		0	1
15 years and over	..	..		7	1

By and large not sufficient young children are receiving Smallpox Vaccination either from a communal or individual point of view. From the communal point of view, the greater the number of infants vaccinated the more likely are we to attain a reasonable degree of herd immunity.

From the individual aspect initial vaccination protects against the more serious complications attendant on Smallpox vaccination when the latter is performed for the first time in adult life.

Immunisation

The figures for the various immunological procedures performed within the Borough during 1963 are shown thus :—

<i>Poliomyelitis</i>				<i>Males</i>	<i>Females</i>
Completed initial course of injections during 1963—					
Born 1943/1963	..	..	..	178	149
Born before 1943	..	..	..	5	17
Reinforcing doses	..	..	..	15	27
<i>Diphtheria</i>					
Under 15 years of age—					
Completed initial course of treatment				213	228
Received Reinforcing injections	..			126	131
<i>Whooping Cough</i>					
Under 15 years of age—					
Completed initial course of injections				144	115
Received Reinforcing injections	..			10	9
<i>Smallpox Vaccination</i>					
Received initial vaccination—					
Under 15 years	..	..	..	30	35
15 years and over	..	..	..	4	10
Re-vaccination—					
Under 15 years	..	..	..	2	2
15 years and over	..	..	..	11	12

Mental Health

Sixty-eight mentally sub-normal children attended the Occupation Centre at 'Innisfallen', King Street, Bradley. Excellent work is being done in leading these children to a better pattern of social behaviour. Periodic medical examinations are carried out by the School Medical Officers.

E. CARE OF THE ELDERLY

It is pleasing to be able to report that for the third successive year it was found unnecessary to invoke Section 47 of the National Assistance Act, 1948, and its subsequent amendments for the compulsory removal of any aged persons or chronic sick to suitable accommodation. This speaks well for the care bestowed on the elderly by both the Statutory Authorities and Voluntary Organisations, and to my mind, especially the sons and daughters of the aged themselves.

PART II.

SOCIAL AND STATISTICAL INFORMATION

*“What then remains, but that we still should cry,
Not to be born, or being born, to die?”*

—“The World”.

Francis Bacon (1561—1626).

Highly industrialised, thickly populated Bilston, is a typical ‘Black Country’ town.

- (1) Geographical situation: latitude 52.340 N., longitude 2.400 W.
- (2) Elevation 400—525 feet.
- (3) Area of Borough : 1,871 acres.
- (4) Population :

(a) Census 1961	33,077
(b) Registrar General’s Estimate for mid-year 1963	33,300
- (5) Density of population per acre 18
- (6) Number of inhabited houses at 31/12/63 9,303
- (7) Rateable Value at 1/4/64 £1,495,886
- (8) Product of 1d. rate 1963/64 £6,071
- (9) The following figures are kindly supplied by the
 Manager of the Bilston Employment Exchange
 Unemployment figures :

	<i>Men</i>	<i>Women</i>
9.12.63 Wholly Unemployed	304	101
Temporary Stopped	11	1
- (10) The total number of factories in the town is 186.

TABLE I.

Brass Founders	4
Builders	4
Clothing Manufacturers	3
Coal Merchants	3
Engineering	78
Enamellers	3
Food Preparing Premises	18
Goods Transport	1
Glassware	1
Holloware	6
Iron and Steel	20
Laundry	1
Miscellaneous	13
Printers	3
Petrol Storage	1
Shoe Repairers	14
Stonemasons	2
Undertakers	1
Woodwork	9
Invalid Carriage Manufacturers	1

Action taken under Part 1 and Part 8 of the Factories Act, 1961, is tabulated as follows :—

TABLE II
Part 1 of the Act.

Inspections for purposes as to health.

Premises	Number on Register	Number of		
		Inspections	Written Notices	Occupiers Prosecuted
Factories in which Sections 1, 2, 3, 4 and 6 are to be enforced by Local Authorities	17	4	—	—
Factories in which Section 7 only is enforced by the Local Authority	169	16	—	—
Other Premises in which Section 7 is enforced by Local Authority	8	—	—	—

TABLE III

Cases in which defects were found.

Particulars	Found	Remedied	Referred		Number of cases in which prosecutions were instituted
			To H.M. Inspector	By H.M. Inspector	
Want of cleanliness	—	—	—	—	—
Overcrowding ..	—	—	—	—	—
Unreasonable Temperature	—	—	—	—	—
Inadequate Ventilation	—	—	—	—	—
Ineffective drainage of floors	—	—	—	—	—
Sanitary Conveniences unsuitable or defective	2	2	—	2	—
Insufficient	—	—	—	—	—
Not separate for sexes	—	—	—	—	—
Other offences against the Act (Not including offences relating to outwork)	—	—	—	—	—

TABLE IV
Part 8 of the Act.
OUTWORK
(Sections 133 and 134).

Nature of Work	Section 133			Section 134		
	No. of outworkers in list required by Section 133 (1)(c)	No. of cases of default in sending lists to the Council	No. of prosecutions for failure to supply lists	No. of instances of work in unwholesome premises	Notices served	Prosecutions
Wearing Apparel (making, etc.)	-	-	-	-	-	-
Carding, etc. of Buttons, etc.	29	-	-	-	-	-
	29	-	-	-	-	-

Extracts from Vital Statistics

Extracts from Vital Statistics for the Borough during 1963 are given in the following pages, with comments in the appropriate places.

					Births		
<i>Live Births</i>					<i>Total</i>	<i>Males</i>	<i>Females</i>
Legitimate	..	..	..	..	546	280	266
Illegitimate	..	..	..	..	32	17	15
Total					578	297	281

An actual decrease of 68 live births.

Live birth Rate per 1,000 population : 17.36

Comparability factor for births : 0.95

Corrected live birth rate : 16.49

There is a decrease from last year's figure of 17.25

Still Births

It is noted that there is a slight reduction in the still birth rate from 25.64 per 1,000 total live and still births in 1962 to 22.00 in 1963. While this is a welcome trend we have yet to reach the all time low figure of 16.56 per 1,000 total live and still births attained in 1961.

					<i>Total</i>	<i>Males</i>	<i>Females</i>
Legitimate	..	..	..	..	12	9	3
Illegitimate	..	..	..	..	1	1	—
					13	10	3

Still Birth Rate per 1,000 total live and still births : 22.00

TABLE V.

<i>Year</i>							<i>Still Birth Rate</i>
1963	..	..	..	..	..	..	22.00
1962	..	..	..	..	..	..	25.64
1961	..	..	..	..	..	..	16.56
1960	..	..	..	..	..	..	26.27
1959	..	..	..	..	..	..	22.34
1958	..	..	..	..	..	..	34.77
1957	..	..	..	..	..	..	28.81
1956	..	..	..	..	..	..	27.69
1955	..	..	..	..	..	..	35.23
1954	..	..	..	..	..	..	26.36
1953	..	..	..	..	..	..	24.96

Still Birth Rate

<i>Total Live and Still Births</i>					<i>Total</i>	<i>Males</i>	<i>Females</i>
Legitimate	..	..	..	..	558	289	269
Illegitimate	..	..	..	..	33	18	15
Total					591	307	284
<i>Infant Deaths</i>							
Legitimate	..	..	..	..	17	10	7
Illegitimate	..	..	..	..	1	—	1
					18	10	8
Infant mortality rate per 1,000 live births—total :							31.14
Infant mortality rate per 1,000 live births—legitimate :							31.14
Infant mortality rate per 1,000 live births—illegitimate :							31.25

TABLE VI.

Bilston Infant Mortality Rates over recent years.

1962	..	..	..	30.96
1961	..	..	..	19.87
1960	..	..	..	40.28
1959	..	..	..	29.79
1958	..	..	..	20.58
1957	..	..	..	26.17
1956	..	..	..	40.15
1955	..	..	..	27.82
1954	..	..	..	32.5
1953	..	..	..	41.6

A slight increase in the Infant Mortality Rate over that for 1962 is noted, but the Stillbirth, Neo-Natal, and Peri-Natal Rates show a decrease.

TABLE VII.

INFANT DEATHS DURING 1963

Taken from Death Returns

<i>Date of Death</i>	<i>Age</i>	<i>Sex</i>	<i>Cause of Death</i>
19. 2.63	7 hours	Male	1A) Congestive Cardiac Failure. B) Severe Rhesus Incompatibility.
24. 2.63	2 days	Male	1A) Cerebral Damage. C. B) Birth. II) Congenital Heart Disease.
26. 2.63	11 months	Male	1A) Acute Gastro Enteritis.
31. 3.63	6 weeks	Female	1A) Asphyxia. B) Inhalation of Fluid Milky Stomach Content.
13. 4.63	9 months	Female	1A) Pneumococcal Meningitis.
17. 4.63	11 hours	Male	1A) Atelectasis. C. B) Immaturity (Birth Weight 2 lbs. 5 ozs. P.
28. 6.63	1 day	Female	1A) Anencephaly. C.
29. 7.63	6 months	Female	1A) Meningitis. C. B) Meningocele. C) Hydrocephalus.
4. 8.63	9 hours	Male	II) Respiratory Infection 1A) Anoxia. P. B) Premature. C) Accidental Haemorrhage.
7. 8.63	3 months	Female	1A) Acute Bronchitis.
8. 8.63	1 week	Male	1A) Pneumonia. C. B) Congenital Heart Disease. P.
17. 8.63	2 months	Female	1A) Cardiac Failure and Dehydration. B) Gastro Enteritis. C) Bilateral Otitis Media.
20.10.63	8 hours		1A) Immaturity (26 weeks gestation) P.
6.11.63	8 months	Male	1A) Gastro Enteritis.
1.12.63	2 days	Male	1A) Cyanotic Heart Disease. C.
4.12.63	2 months	Male	1A) Whooping Cough.
12.12.63	11 months	Male	1A) Gastro Enteritis.
21.12.63	3 weeks	Female	1A) L.Lobar Pneumonia.

Of eighteen infant deaths, congenital defects were associated with six and prematurity with three denoted in the Table VII by a large 'C' and 'P' respectively. One death combined prematurity with evidence of congenital abnormality.

Four deaths were ascribed to Gastro-Enteritis.

The death of a two month old child from whooping cough is a most unsatisfactory item on any report dealing with matters of health. Normally immunisation procedures do not commence until the age of ten or twelve weeks is attained. This is largely for administrative convenience, but in my opinion, whooping cough vaccine should be given much earlier, preferably at the beginning of the second month of life. Most experts, including Dr. H. J. Parish, formerly Clinical Research Director, Wellcome Research Laboratories, Beckenham, Kent, consider that the first four weeks of life should be avoided as this is a period of adjustment from intra to extra-uterine life. As well as the necessity for earlier immunisation, a more intensive drive for more widespread immunisation is essential in averting such tragedies.

Neo Natal Mortality Rate

Deaths of infants under 4 weeks of age per 1,000 live births :	15.57
Illegitimate live births per cent. of total live births :	5.54

Early Neo Natal Mortality Rate

Deaths of infants under 1 week of age per 1,000 total live births :	12.11
---	-------

Peri Natal Mortality Rate

Stillbirths and Deaths under 1 week combined per 1,000 total live and still births :	33.84
--	-------

Maternal Mortality (including Abortion)

It is satisfactory to report that no deaths ascribed to pregnancy, child-birth or abortion, occurred in 1963.

General Deaths

	<i>Total</i>	<i>Males</i>	<i>Females</i>
Deaths (all causes)	352	219	133
Crude Death Rate per 1,000 population :	10.57		
Comparability Factor for Deaths :	1.42		
Corrected Death Rate :	15.01		

TABLE VIII.

Deaths during 1963 by Age Groups

	<i>Males</i>	<i>Females</i>	<i>Total</i>
Under 4 weeks	6	3	9
4 weeks and under 1 year ..	4	5	9
1—4	2	—	2
5—14	—	—	—
15—24	1	1	2
25—34	4	1	5
35—44	11	6	17
45—54	24	12	36
55—64	48	15	63
65—74	62	26	88
75 and over	57	64	121
	219	133	352

Deaths from Certain Causes

TABLE IX.

	1963	1962
Cardio Vascular Diseases	92	118
Vascular Lesions of the Nervous System ..	53	52
Cancer	60	60
Bronchitis	44	33
Influenza	2	7
Pneumonia	29	27
Pulmonary Tuberculosis	—	3

Causes of Death during 1963 in detail

TABLE X.

<i>Cause of Death</i>	<i>Males</i>	<i>Females</i>	<i>Total</i>
Tuberculosis Respiratory	—	—	—
Tuberculosis Other	—	—	—
Syphilitic Diseases	—	—	—
Diphtheria	—	—	—
Whooping Cough	1	—	1
Meningococcal Infections ..	—	—	—
Acute Poliomyelitis	—	—	—
Measles	—	—	—
Other Infective and Parasitic Diseases	—	—	—
Malignant Neoplasm (Stomach) ..	5	1	6
Malignant Neoplasm (Uterus) ..	—	2	2
Malignant Neoplasm (Breast) ..	—	5	5
Malignant Neoplasm (Lung Bronchus)	22	2	24
Other Malignant and Lymphatic Neoplasms	11	12	23
Leukaemia, Aleukaemia	1	—	1
Diabetes	—	1	1
Vascular Lesions of Nervous System	29	24	53
Coronary Disease, Angina ..	37	18	55
Hypertension with Heart Disease	1	6	7
Other Heart Disease	12	10	22
Other Circulatory Diseases ..	4	4	8
Influenza	1	1	2
Pneumonia	17	12	29
Bronchitis	36	8	44
Other Diseases of Respiratory System	2	3	5
Ulcer of Stomach and Duodenum	4	2	6
Gastritis, Enteritis and Diarrhoea	3	—	3
Nephritis and Nephrosis ..	1	—	1
Hyperplasia of Prostate	3	—	3
Pregnancy, Childbirth, Abortion	—	—	—
Congenital Malformation ..	4	3	7
Other defined or ill-defined diseases	10	12	22
Motor Vehicle Accidents	5	1	6
All other Accidents	3	5	8
Suicide	7	1	8
Homicide and Operation of War	—	—	—
TOTAL ..	219	133	352

Comparison with the figures for 1962 show a decrease in all deaths by twenty-one. It is very heartening to be able to report that no deaths were due to Tuberculosis in any form. Deaths from all forms of Cancer remained stationary at sixty, but deaths from lung cancer increased from ten to twenty-four. Unlike the National experience, deaths from Cardio-Vascular lesions are decreased by twenty-six. The one unsatisfactory figure among Bilston's Vital Statistics for 1963 is the death from Whooping Cough previously mentioned in Part II of this Report.

PART III. EPIDEMIOLOGY

*"Ye can call it influenza if ye like", said Mrs. Machin.
There was no influenza in my young days.
We called a cold a cold".*

—The Card. Ch. 8.
Enoch Arnold Bennett. (1867—1931).

Tuberculosis

Twenty-nine cases—twenty-seven Pulmonary and two Non-Pulmonary—of Tuberculosis were notified during the year. This is a slight increase over last year's figures but happily no tuberculosis deaths were recorded.

TABLE 1.
Tuberculosis Notifications

<i>Year</i>			<i>Pulmonary</i>	<i>Non-Pulmonary</i>
1951	..	..	54	7
1952	..	..	44	3
1953	..	..	53	4
1954	..	..	57	8
1955	..	..	43	1
1956	..	..	28	Nil
1957	..	..	29	2
1958	..	..	22	Nil
1959	..	..	27	3
1960	..	..	19	1
1961	..	..	34	1
1962	..	..	17	4
1963	..	..	27	2

Measles

1963 was once again a 'measles' year, three hundred and eighty seven cases being notified, in contrast with the eighteen cases of 1962. Happily there were no cases of sufficient virulence or of such severe complications to require hospitalization. Neither were there any fatalities.

Scarlet Fever

Ten cases were notified.

Diphtheria

It is very pleasing to be able to report for the sixth year in succession, that no cases of Diphtheria occurred within the Borough. This is an outstanding example of the value of immunisation.

Whooping Cough

Thirty-three cases of Whooping Cough were notified and one death was recorded. Reference has already been made to this tragedy. All these cases could be prevented by adequate immunological procedures. As stressed in last year's and many Annual Reports of the past, the blame for non-immunisation of children rests entirely with the parents. There are adequate immunological facilities available from both the General Practitioners and Local Authority Services.

Acute Anterior Poliomyelitis

No notification of this once dreaded disease was received—again thanks to intensive immunising campaigns in the past few years.

Pneumonia

Eight cases were notified—a similar figure being received in 1962.

Meningococcal Infection

For the second successive year there were no notifications.

Dysentery and Food Poisoning

Three hundred and six cases were notified, but on bacteriological examination at the Public Health Laboratory in Stafford one hundred and twenty four were confirmed. The confirmed cases were all of Sonne Dysentery and occurred mainly among the school population. The epidemic was characterised by its extreme mildness.

Venereal Diseases

The following figures were kindly supplied, through the courtesy of Dr. Wigfield, Consultant Venereologist, Wolverhampton Hospital Group, for Bilston residents during 1963 :—

<i>Total</i>	1963	..	..	..	101
Syphilis	..	..	..	..	11
Gonorrhoea	..	..	..	..	41
Non-Venereal	..	..	..	..	49
<i>Coloured</i>					
Syphilis	..	..	..	..	10
Gonorrhoea	..	..	..	..	26
Non-Venereal	..	..	..	..	14
<i>Whites</i>					
Syphilis	..	..	..	..	1
Gonorrhoea	..	..	..	..	15
Non-Venereal	..	..	..	..	35

There is a slight increase in the incidence of Syphilis and Gonorrhoea—an event experienced by the country as a whole.

Scabies

For the second year in succession no notifications of Scabies were received.

TABLE 2
Infectious Diseases notified 1963

Disease	Total cases notified	Total cases confirmed	Cases admitted to hospital	Deaths
Scarlet Fever	10	10	1	—
Whooping Cough	33	33	5	—
Acute Anterior Poliomyelitis	—	—	—	—
Measles	387	387	6	—
Diphtheria	—	—	—	—
Dysentery	306	124	7	—
Meningococcal Infection ..	—	—	—	—
Pneumonia	8	8	1	—
Smallpox	—	—	—	—
Acute Encephalitis	—	—	—	—
Enteric or Typhoid Fever ..	—	—	—	—
Fever	—	—	—	—
Paratyphoid	—	—	—	—
Erysipelas	—	—	—	—
Food Poisoning	—	—	—	—
Tuberculosis—Respiratory	27	27	14	—
Tuberculosis—Meninges	—	—	—	—
C.N.S.	—	—	—	—
Tuberculosis—Other	2	2	1	—
Puerperal Pyrexia	—	—	—	—
Ophthalmia Neonatorum	—	—	—	—
Total	773	591	35	—
Total cases confirmed during 1961			797	
Total cases confirmed during 1962			75	

TABLE 3
Infectious Diseases—Confirmed. In Wards. 1963

DISEASE	New Town		High Town		Town Hall		Ettingshall		Bradley		TOTAL	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Scarlet Fever	—	—	1	2	1	2	—	1	1	2	3	7
Whooping Cough ..	—	3	—	1	8	9	—	2	9	1	17	16
Poliomyelitis	—	—	—	—	—	—	—	—	—	—	—	—
Dysentery	6	19	—	—	23	17	2	4	21	32	52	72
Meningococcal Infection	—	—	—	—	—	—	—	—	—	—	—	—
Pneumonia	2	—	—	—	—	2	1	3	—	—	3	5
Measles	22	23	15	15	60	46	48	46	62	50	207	180
Erysipelas	—	—	—	—	—	—	—	—	—	—	—	—
Food Poisoning ..	—	—	—	—	—	—	—	—	—	—	—	—
Puerperal Pyrexia ..	—	—	—	—	—	—	—	—	—	—	—	—
Ophthalmia Neonatorum	—	—	—	—	—	—	—	—	—	—	—	—
TOTALS	30	45	16	18	92	76	51	56	93	85	282	280

TABLE 4

Pulmonary and Non-Pulmonary Tuberculosis Cases notified during 1961 — 1963

	1961		1962		1963		Total	
	Male	Female	Male	Female	Male	Female	Male	Female
Under 1 year ..	-	-	-	-	-	-	-	-
1—4 ..	-	-	1	-	1	-	2	-
5—14 ..	2	1	2	1	1	1	5	3
15—24 ..	-	4	1	2	5	1	6	7
25—44 ..	10	8	6	6	7	6	23	20
45—64 ..	8	1	2	-	6	-	16	1
65 and over ..	1	-	-	-	-	-	1	-
Age unknown ..	-	-	-	-	1	-	1	-
	21	14	12	9	21	8	54	31

TABLE 5
Deaths from Pulmonary and Non-Pulmonary Tuberculosis during 1961—1963

	1961		1962		1963		TOTAL	
	Male	Female	Male	Female	Male	Female	Male	Female
Under 1 year	—	—	—	—	—	—
1—4	—	—	—	—	—	—
5—14	—	—	—	—	—	—
15—24	—	—	—	—	—	—
25—44	2	—	1	—	3	—
45—64	1	—	1	1	2	1
65 and over	—	—	—	—	—	—
	3	—	2	1	—	—	5	1

TABLE 6

**Tuberculosis Statistics—Number on Register at
31st December, 1963**

		<i>Males</i>	<i>Females</i>	<i>Total</i>
Pulmonary	Under 1 year	—	—	—
	1 to 5 years	2	—	2
	6 to 15 years	10	9	19
	16 to 25 years	17	23	40
	26 to 45 years	84	93	177
	46 to 65 years	79	18	97
	Over 65 years	19	7	26
	Ages unknown	5	3	8
	Total all ages	216	153	369
Non-Pulmonary	Under 1 year	—	—	—
	1 to 5 years	—	—	—
	6 to 15 years	2	1	3
	16 to 25 years	2	1	3
	26 to 45 years	3	9	12
	46 to 65 years	1	1	2
	Over 65 years	1	—	1
	Total all ages	9	12	21
	Pulmonary all ages	216	153	369
	Non-Pulmonary all ages	9	12	21
	GRAND TOTAL	225	165	390

TABLE 7
Pulmonary Tuberculosis in Wards
1954—63

Year	New Town		High Town		Town Hall		Ettingshall		Bradley		Total	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
1954	4	5	3	2	9	7	8	5	5	9	29	28
1955	3	5	7	—	4	11	3	3	8	4	25	23
1956	3	2	1	—	5	5	1	1	4	4	14	12
1957	7	4	2	1	1	6	3	3	2	—	15	14
1958	4	3	2	—	1	3	2	2	4	1	13	9
1959	3	—	2	1	9	4	2	2	5	3	21	10
1960	1	—	3	—	7	1	1	3	6	2	18	6
1961	2	3	4	2	13	3	1	4	—	2	20	14
1962	—	—	1	—	2	4	5	—	2	3	10	7
1963	5	1	—	2	7	3	5	1	3	—	20	7

TABLE 8
Tuberculosis Notifications

YEAR	PULMONARY		NON-PULMONARY		TOTAL	
	Male	Female	Male	Female	Male	Female
1951	33	21	5	2	38	23
1952	17	27	1	2	18	29
1953	32	21	1	3	33	24
1954	29	28	5	3	34	31
1955	25	23	1	—	26	23
1956	14	12	—	—	14	12
1957	21	16	2	1	23	17
1958	13	12	—	—	13	12
1959	21	10	3	—	24	10
1960	18	6	—	1	18	7
1961	20	14	1	—	21	14
1962	10	8	2	2	12	10
1963	25	7	1	1	26	8

Including Inward Transfers.

PART IV.

HOUSING

*“Your glazing is new and your plumbing’s strange
But otherwise I perceive no change;
And in less than a month, if you do as I bid,
I’d learn you to build me a Pyramid;”*

—A Truthful Song.

Rudyard Kipling (1865—1936).

It is unnecessary for me to stress again the direct correlation between satisfactory housing and healthy living. In 1963 extremely satisfactory progress in building and rehousing was effected. During the year Ministerial confirmation of Areas 91 to 106 and 108 to 109 was received—areas comprising a total of 258 houses.

SCHEDULE

	AREA 91
CROSS STREET	4, 5, 5 Bk. 5 (void), 6.
	AREA 92
CROSS STREET	9, 7 Bk. 9, 10, 10 Bk. 10, 11, 12, 12A.
	AREA 93
CROSS STREET	14, 15.
	AREA 94
CROSS STREET	18, 19, 20, 21.
	AREA 95
HILL STREET	65, 67, 69, 71, 73, 75, 77, 79, 81, 83, 85, 87, 89, 91.
	AREA 96
HILL STREET	6, 8, 2 Bk. 8, 10, 12.
	AREA 97
HILL STREET	18, 20, 4 Bk. 20, 22, 24, 6 Bk. 22 (void), 8 Bk. 22 (void) 10 Bk. 22, 26, 28, 12 Bk. 28, 30.
	AREA 98
HILL STREET	50, 52, 54.
	AREA 99
HILL STREET	66, 68, 70, 72.
	AREA 100
HILL STREET	76, Bk. 76, 78, 32 Bk. 78, 80, 82, 34 Bk. 82
	AREA 101
HILL STREET	86, 88, 90, 92, Bk. 92, 94, BK. 94.
	AREA 102
WILKINSON STREET	1, 2, 3.
	AREA 103
LORD STREET	8, 10, 12, 14, 2 Bk. 14, 4 Bk. 14, 8 Bk. 14 (void), 16 (void), 18, 20, 10 Bk. 18.
BANK STREET	61, 63, 65, 67.
	AREA 104
LORD STREET	22 (void), 24, 26, 28 (void), 12 Bk. 28, 30, 14 Bk. 30, 32, 34, 36, 16 Bk. 36, 38 (void), 18 Bk. 38 (void), 20 Bk. 38 (void), 22 Bk. 40, 40, 42, 24 Bk. 42, 44.
	AREA 105

BANK STREET	60, 62, 56 Bk. 62, 64, 66, 68, 58 Bk. 68, 70, 72, 74, 76, 78, 80, 82 (void), 84.
JORDAN PLACE	1.
KING STREET	6, 8, 10, 12, 14, 16, 18.
	AREA 106
KING STREET	25, 27, 29 (void), 31, 33, 9 Bk. 33, 11 Bk. 33, 13 Bk. 33.
	SCHEDULE
	AREA 108
JOHN STREET	3, 5, 7, 9, 11, 13, 1 Bk. 3, 3 Bk. 3, 5 Bk. 13, 7 Bk. 13, 15, 17, 19, 21, 23, 25, 27, 29, 31, 33, 35, 37, 39.
GEORGE STREET	79, 81, 83, 25 Bk. 83, 27 Bk. 83, 85, 87, 89.
	AREA 109
JOHN STREET	43, 45, 47, 49, 51, 53, 55, 57, 59, 61, 63, 65, 67, 69, 71, 73, 75, 77, 79, 81, 83, 85, 87, 89, 91, 93, 95, 97, 99, 101, 103, 1 Bk. 103, 105, 107, 3 Bk. 107, 109, 111, 1 Bk. 111, 3 Bk. 111, 113, 115, 117, 119, 121, 123, 125, 127, 129, 131, 1 Bk. 131, 116, 118.
GEORGE STREET	1, 3, 5, 7, 9, 11, 13, 15, 17, 19, 21, 23, 27, 29, 31, 33, 35, 37, 41, 43, 45, 47, 49, 22 Flat 1, 22 Flat 2, 24, 26, 28.
PUMP STREET	2, 4, 6, 8, 10, 12.
VICTORIA STREET	1, 3, 5, 7, 9, 11, 13, 2.
MATTHEW STREET	1, 3, 5, 7, 9, 11.

Two hundred and seventy five municipal dwellings were erected—that is an increase of one hundred and sixty seven over the previous year.

One hundred and twenty three unfit houses—nineteen more than in 1962—were closed or demolished.

Applicants for houses are now being rehoused in the ratio of 2 : 1 from slum clearance and from the 'Points' List.

Houses closed or demolished since the War						
	<i>Year</i>					<i>Total</i>
War to	1947	..	..	..	..	50
	1948	..	..	..	..	46
	1949	..	..	..	..	21
	1950	..	..	..	..	30
	1951	..	..	..	..	108
	1952	..	..	..	..	93
	1953	..	..	..	..	120
	1954	..	..	..	..	64
	1955	..	..	..	..	54
	1956	..	..	..	..	94
	1957	..	..	..	..	191
	1958	..	..	..	..	183
	1959	..	..	..	..	126
	1960	..	..	..	..	90
	1961	..	..	..	..	63
	1962	..	..	..	..	101
	1963	..	..	..	..	123
						<u>1,557</u>

PART V.

SANITARY CIRCUMSTANCES OF THE AREA

*“Youk’n hide de fier, but w’at
you gwine do wid de smoke?”*

—Uncle Remus, ch. 34. Plantation Proverbs.
Joe Chandler Harris (1848—1908).

Water

The Wolverhampton Corporation Water Undertaking is responsible for the Bilston water supply following the Wolverhampton Water Order, 1958. Mr. W. C. Johnson, M.I.C.E., the Wolverhampton Water Engineer, has very kindly supplied the following information.

ANNUAL REPORT OF THE WATER SUPPLY

The following information is in respect of the area administered by the Bilston Borough Council, for the year ended 31st December, 1963.

CONTENTS

1. Introduction

- 1.1 Number of Samples Examined in 1963
- 1.2 Number of Samples : annual comparison

2. Bacteriological Examinations

- 2.1 Sampling scheme
- 2.2 Quality of water
- 2.3 Results

3. Chemical Examinations

- 3.1 Cosford Works : Sanitary Analyses
 - 3.1.1 General Notes
 - 3.1.2 Results
- 3.2 Distribution System : mineral analyses
 - 3.2.1 General notes
 - 3.2.2 Results—reservoirs, etc.
 - 3.2.3 Results—local authority areas

4. Biological Examinations

- 4.1 Sampling Scheme
- 4.2 Cosford and Tettenhall : algal counts
 - 4.2.1 General notes
 - 4.2.2 Results

5. Radiological Examinations

- 5.1 Sampling scheme
- 5.2 Results

1. INTRODUCTION

1.1 Number of Samples Examined in 1963

<i>Bacteriological</i>					
Water before and during treatment	..	..	..	..	855
Water leaving works	..	..	..	..	760
Water in distribution system	..	..	..	..	362
Miscellaneous samples	..	..	..	..	273
					—
					2250
<i>Chemical</i>					
Cosford—Sanitary analyses	..	..	..	..	180
Tettenhall reservoirs—sanitary analyses	..	..	..	..	4
Distribution system—mineral analyses	..	..	..	..	280
Full chemical analyses	..	..	..	..	2
Stableford quarterly analyses	..	..	..	..	7
Roughton mineral analyses and yield test	..	..	..	..	60
Miscellaneous samples	..	..	..	..	97
					—
					630
<i>Biological</i>					
Cosford and Tettenhall—algal counts	..	..	..	..	197
Distribution system—examinations	..	..	..	..	122
Miscellaneous examinations	..	..	..	..	22
					—
					341
<i>Radiological</i>					
Cosford—River water	..	..	..	..	32
Tettenhall—reservoir water	..	..	..	..	32
Rain water	..	..	..	..	31
Boreholes	..	..	..	..	5
					—
					100
GRAND TOTAL					..
					—
					3321
					—

1.2 Number of Samples—Annual Comparison

Year ending	31.3.60	31.3.61	31.3.62	31.12.62	31.12.63
Bacteriological ..	2048	1882	2082	2270	2250
Chemical	125	140	379	577	630
Biological	—	—	101	323	341
Radiological	—	—	—	76	100
TOTAL	2173	2022	2562	3246	3321

2. BACTERIOLOGICAL EXAMINATIONS

2.1 Sampling Scheme

The sampling scheme continues to conform to the standards set by the World Health Organisation. No new sources have been pumped to supply during the year.

The reservoirs, tanks, re-pumping stations and mains have been examined on the usual 3-weekly rota except during January and February when the installations were sampled fortnightly as the severe weather made sampling from the mains impossible. Bishops Wood Tank and Kiddemore Green Re-pumping Station are no longer in general use.

The Laboratory was closed for two weeks in June for cleaning and re-decoration. During this time, samples were sent to the Public Health Laboratory, Stafford, for examination.

2.2 Quality of Water

Organisms of *Escherichia Coli* type 1 were confirmed in three samples of water leaving Tettenhall and in one sample from Rindleford. These organisms were also confirmed in seven samples from the mains, and in each case the stretch of main affected was immediately sterilised and re-sampled.

These results conform to a satisfactory standard of quality.

Of the 253 samples from the new mains, 76% were passed as satisfactory, compared with 83% in 1962.

The full table of results appears in the following section 2.3.

2.3 Results of Bacteriological Examinations

Source of Supply	No. of Samples Taken	No. of Samples containing			
		0	1-2	3-10	Over 10
		coliform organisms per 100 ml			
(1) Water going into distribution from Works					
Cosford Works	100	100	0	0	0
Tettenhall Works	200	194	5	1	0
Dimmingsdale Works	94	90	3	1	0
Hilton Works	97	97	0	0	0
Bratch Works	95	95	0	0	0
Tom Hill Works	91	91	0	0	0
Rindleford Works(untreated)	45	44	1	0	0
Neachley Works	38	38	0	0	0
Total	760	749	9	2	0
(2) Water from Distribution System					
Reservoirs :					
Tettenhall	32	32	0	0	0
Goldthorn Hill	16	16	0	0	0
Bushbury Hill	16	16	0	0	0
Coton Road	33	31	2	0	0
Woodcross	14	14	0	0	0
Hermitage	31	31	0	0	0
Hundred Hill	17	17	0	0	0
Elevated Tanks :					
Essington	14	14	0	0	0
Bishops Wood	—	—	—	—	—
Gough Road, Coseley ..	14	14	0	0	0
Re-pumping Stations :					
Goldthorn Hill	15	15	0	0	0
Sandbeds	15	15	0	0	0
Millfields	15	15	0	0	0
Linhouses	2	2	0	0	0
Salop Street, Bridgnorth	15	15	0	0	0
Kiddemore Green ..	—	—	—	—	—
Mains					
Hydrants	112	89	6	7	10
Domestic Taps	1	1	0	0	0
Total	362	337	8	7	10

Source of Supply	No. of Samples Taken	No. of Samples containing			
		0	1-2	3-10	Over 10
		coliform organisms per 100 ml.			
(3) Water Before and During Treatment					
Cosford :					
River Worfe raw water ..	49		See below		
Settled water	49	47	1	0	1
Filtered water	49	49	0	0	0
Well water	49	49	0	0	0
Tettenhall :					
No. 1 Borehole	46	46	0	0	0
No. 2 Borehole	47	47	0	0	0
Dimmingsdale :					
No. 1 Borehole	25	25	0	0	0
No. 2 Borehole	25	25	0	0	0
No. 3 Borehole	45	45	0	0	0
Hilton :					
No. 1 Borehole	47	47	0	0	0
No. 2 Borehole	48	48	0	0	0
Stableford :					
No. 1 Borehole	31	30	1	0	0
No. 2 Borehole	26	26	0	0	0
No. 3 Borehole	62	59	2	1	0
No. 4 Borehole	65	65	0	0	0
Tom Hill :					
Borehole	88	88	0	0	0
Copley :					
Trial Borehole	3	3	0	0	0
Main Borehole	46	46	0	0	0
Neachley :					
No. 1 Borehole	24	24	0	0	0
No. 2 Borehole	31	31	0	0	0
Total	855				

COSFORD — RIVER WORFE RAW WATER

		Organisms per 100 ml.	
		MEDIAN	AVERAGE
Presumptive Coliform Organisms ..		930	1130
Escherichia Coli Type I		665	780

(4) Miscellaneous Samples

New and Repaired Mains	253
Sundry	20
Total	273

3.

CHEMICAL EXAMINATIONS

3.1 Cosford Works—Sanitary Analyses

3.1.1. General Notes

The quality of the water passing through Cosford Works is under close surveillance, weekly samples being taken from the raw river water, the settled water before and after filtration, and from the delivery main.

The complete analysis comprises the following tests :—Turbidity, pH, colour, electrical conductivity, nitrate, nitrite, free and saline nitrogen, albuminoid nitrogen, and oxygen absorbed from potassium permanganate in three hours at 37°C.

The tests reported in the following table are those which convey information concerning plant performance and seasonal variation in quality. Results of the other tests are available on application if required.

No major changes in treatment have been carried out in 1963, the process still consisting of pre-chlorination, coagulation with aluminium sulphate, settlement, rapid gravity filtration, super-chlorination of the mixed filtered and well water, followed by terminal de-chlorination to an automatically controlled free chlorine residual. The water going into supply contains roughly equal amounts of treated river water and well water.

3.1.2. Cosford Works—Results of Sanitary Analyses

Monthly averages, in milligrams per litre unless otherwise stated.

Source of Sample	Month	No. of Samples	Turbidity units	Nitrate N	Free & Saline N	Albu- minoid N	Oxygen Absorbed from KMnO ₄
River Worfe raw water	Jan.	5	15	7.4	0.62	0.13	2.65
	Feb.	4	15	7.5	0.76	0.16	3.10
	Mar.	4	21	6.8	0.46	0.28	3.85
	Apr.	4	26	6.4	0.063	0.23	3.80
	May	5	25	4.9	0.041	0.28	3.65
	June)	5	19	5.6	0.049	0.25	3.55
	July)	4	14	6.0	0.034	0.21	2.60
	Aug.	4	19	6.0	0.049	0.25	3.55
	Sept.	4	15	5.8	0.035	0.16	2.90
	Oct.	4	29	7.5	0.19	0.23	5.05
	Nov.	4	19	7.7	0.27	0.17	3.08
	Dec.	3					
Settled water before filtration	Jan.	5	15	7.5	0.600	0.10	2.10
	Feb.	4	12	7.1	0.550	0.13	2.85
	Mar.	4	9.8	6.7	0.026	0.17	2.60
	Apr.	4	12	6.7	0.029	0.14	3.50
	May	5	10	5.5	0.028	0.18	2.40
	June)	5	5.7	5.9	0.028	0.16	1.75
	July)	4	9	6.1	0.025	0.15	1.55
	Aug.	4	9	5.3	0.031	0.14	1.90
	Sept.	4	6	5.6	0.014	0.02	1.50
	Oct.	4	11	9.1	0.160	0.17	2.00
	Nov.	4	13	7.8	0.240	0.13	1.95
	Dec.	3					
Water after filtration	Jan.	5	1.5	7.4	0.55	0.061	1.10
	Feb.	4	1.4	7.1	0.50	0.082	1.45
	Mar.	4	1.1	6.7	0.022	0.120	1.70
	Apr.	4	1.0	6.5	0.016	0.095	1.40
	May	5	0.9	5.6	0.021	0.130	1.20
	June)	5	1.0	5.5	0.016	0.110	1.05
	July)	4	1.4	6.1	0.020	0.120	1.05
	Aug.	4	1.2	5.6	0.018	0.084	1.25
	Sept.	4	1.0	5.4	0.010	0.061	0.95
	Oct.	4	1.2	7.9	0.15	0.140	1.50
	Nov.	4	1.1	8.5	0.24	0.094	1.22
	Dec.	3					
Water going into supply	Jan.	5	1.0	6.1	0.033	0.028	0.57
	Feb.	4	0.9	5.9	0.036	0.035	0.65
	Mar.	4	0.6	5.9	0.009	0.045	0.80
	Apr.	4	0.5	5.2	0.010	0.053	0.70
	May	5	0.3	5.6	0.007	0.058	0.70
	June)	5	0.5	4.8	0.008	0.055	0.50
	July)	4	0.7	5.6	0.013	0.050	0.55
	Aug.	4	0.7	4.5	0.009	0.045	0.70
	Sept.	4	0.6	5.2	0.007	0.022	0.50
	Oct.	4	0.6	7.6	0.011	0.073	0.80
	Nov.	4	0.6	7.1	0.011	0.060	0.60
	Dec.	3					

3.2 Distribution System—mineral analyses

3.2.1 General Notes

Weekly samples covering the distribution system are taken on the same rota as the bacteriological examinations and are subjected to the following tests:—pH, electrical conductivity, total hardness, calcium, magnesium, sodium, potassium, alkalinity (carbonate hardness) and chloride. The anion balance expressed as milli-equivalents per litre, is recorded as sulphate plus nitrate.

The results of these examinations give an up-to-date picture of the patterns of water distribution in our rather complex distribution system as well as providing detailed information of the quality of water in any given area of supply.

Of the above tests, those of most general interest to the consumer are hardness and chloride, and therefore these are given in section 3.2.3, which gives the ranges of values for parts of each administrative area. Full details for any particular area may be obtained on application.

Section 3.2.2 gives a somewhat more detailed analysis of the water at installations supplying water from mixed or variable sources.

Only the extreme values are shown in the tables, since it is these rather than the averages, that are of interest to consumers.

The water supplied is not plumbo-solvent. Fluoride values fall within the range 0.02—0.12 ppm (as F.)

3.2.2 Distribution System—Mineral Analyses—Reservoirs, etc.

Maximum and minimum results for total hardness, sodium, alkalinity (*i.e.*, carbonate hardness) and chloride. Results in mg. per litre.

Source of Sample	Number of Samples	Total Hardness		Sodium (as Na)		Alkalinity (as CaCO ₃)		Chloride (as Cl)	
		Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.
Tettenhall									
No. 1 Reservoir ..	37	280	365	57	96	156	181	126	232
No. 2 Reservoir ..	37	280	372	43	92	153	179	110	208
Bushbury Hill									
Reservoir	15	286	337	40	82	159	173	94	197
Woodcross Reservoir ..	12	260	300	9	49	180	216	20	108
Coton Road									
No. 1 Reservoir ..	14	188	289	12	17	115	191	24	30
No. 2 Reservoir ..	14	216	290	12	35	135	193	23	104
Goldthorn Hill									
No. 2 Reservoir ..	11	248	278	16	32	185	199	42	75
Re-pumping Station ..	12	276	312	30	55	183	193	69	129
Sandbeds									
Re-pumping Station ..	10	248	276	15	33	184	198	34	70
Millfields									
Re-pumping Station ..	10	219	245	12	18	139	161	18	38
Salop Street, Bridgnorth									
Re-pumping Station ..	10	380	425	250	315	157	166	474	626
Essington									
Tank	13	296	352	48	82	163	176	112	183
Gough Road, Coseley									
Tank	11	216	293	12	49	137	191	27	108

3.2.3 Distribution System—Mineral Analysis by Districts

Ranges of Hardness and Chloride in those parts of the various local authority areas supplied by the Wolverhampton Corporation Water Undertaking.

District	HARDNESS		CHLORIDE (as Cl) mg. per litre
	mg. per litre	Degrees	
BILSTON, Borough			
Millfields, Bradley, Moxley ..	180 — 260	13 — 19	20 — 40
Remainder of area	250 — 320	17 — 23	40 — 110
BRIDGNORTH, Borough			
Bridgnorth town	380 — 430	27 — 31	470 — 630
BRIDGNORTH, Rural District			
R.A.F. Station, Bridgnorth ..	380 — 430	27 — 31	470 — 630
Wooton	20 — 30	1 — 2	10
Remainder of supply area ..	260 — 300	19 — 21	45 — 75
CANNOCK, Rural District			
Wheaton Aston, Bishops Wood, Essington, Lapley, Stretton, Brewood	280 — 380	20 — 27	40 — 250
Featherstone, Shareshill ..	190 — 220	13 — 15	150 — 200
COSELEY, Urban District			
Ettingshall, Daisy Bank ..	180 — 260	13 — 19	20 — 40
Remainder of supply area ..	250 — 320	17 — 23	20 — 80
DARLASTON, Urban District			
Bentley	250 — 320	17 — 23	40 — 80
SEDGLEY, Urban District			
Goldthorn Park	250 — 320	17 — 23	20 — 80
SEISDON, Rural District			
Seisdon, Trysull, Wombourn, Swindon	90 — 110	6 — 8	20 — 75
Orton	220 — 270	15 — 19	20 — 30
Lower Penn, Pattingham ..	260 — 280	18 — 20	18 — 30
Oaken, Bilbrook, Wrottesley, Codsall.	280 — 380	20 — 27	40 — 250
Himley	150 — 210	10 — 15	20 — 30
SHIFNAL, Rural District			
Albrighton, Donington ..	250 — 280	17 — 20	40 — 50
TETTENHALL, Urban District			
Tettenhall, Compton	280 — 380	20 — 27	20 — 250
WALSALL, County Borough			
Small area adjoining Darlaston	250 — 320	17 — 23	40 — 80
WEDNESFIELD, Urban District			
Wednesfield	190 — 380	13 — 27	20 — 250
WILLENHALL, Urban District			
Willenhall	250 — 320	17 — 23	40 — 80
WOLVERHAMPTON, C'ty B'ough			
Merridale, Oxbarn, Penn, Blak- enhall, Parkfield and Bushbury Wards	250 — 320	17 — 23	20 — 80
Remainder of area	280 — 380	20 — 27	20 — 250

4.

BIOLOGICAL EXAMINATIONS

4.1 Sampling Scheme

As in 1962 weekly samples are taken from the raw river water and the delivery main at Cosford and from the open reservoirs at Tettenhall. These are examined quantitatively for algae. The results obtained have proved very valuable as an indicator of the effectiveness of the treatment applied. The counts have now been carried out over a period of three years and annual patterns are becoming evident.

The eight-week rota system for the qualitative examination of mains water has continued throughout the year. Sintered steel filters of larger pore size than those used previously were obtained in January. These allow a faster rate of flow of water and are less likely to become clogged. Consequently larger columns can be filtered quickly and easily.

A number of miscellaneous examinations were also carried out.

4.2 Cosford and Tettenhall—Algal Counts

4.2.1 General Notes

The counts, expressed in number of cells per ml., are analysed into four main classes, as follows:—

CHLOROPHYCEAE — Those flagellate forms possessing chlorophyll and all green algae.

BACILLARIOPHYCEAE — The diatoms.

XANTHOPHYTA — The yellow, yellow-brown and yellow-green algae, plus the PERIDINAE.

*CYANOPHYCEAE — The blue-green algae.

*Replacing the American term MYXOPHYCEAE of the 1962 report.

BIOLOGICAL EXAMINATION

4.2 Cosford and Tettenhall—Algal Counts.

4.2.2 RESULTS

Average numbers of cells per ml.

	Jan.	Feb.	Mar	Apl.	May	June	July	Aug	Sep.	Oct.	Nov	Dec.
Cosford — River Worfe												
Number of Samples ..	4	4	3	4	5	4	4	5	4	5	4	3
Chlorophyceae ..	30	50	305	985	1250	790	1780	895	355	90	100	195
Bacillariophyceae ..	260	285	1665	5650	8825	1775	1140	700	1450	2360	470	1040
Xanthophyta ..	20	40	60	20	80	75	75	5	35	35	20	30
Cyanophyceae ..	0	0	10	30	10	0	75	430	430	35	30	0
Total ..	310	275	2040	6685	10165	2640	3070	2030	2270	2520	620	980
Cosford — Delivery Main												
Number of samples ..	4	4	3	4	4	4	4	5	4	5	4	3
Chlorophyceae ..	0.9	0.4	1.2	0.3	1.5	3.1	6.5	2.1	1.0	0.4	0.2	2.4
Bacillariophyceae ..	4.5	3.3	5.4	4.8	5.4	2.0	3.8	0.6	1.6	0.6	0.7	1.4
Xanthophyta ..	0.6	2.5	0.7	1.0	0.7	0.7	0.5	1.0	0.4	1.8	1.3	1.1
Cyanophyceae ..	0.1	0.2	0.6	0.1	0.3	0.4	0.4	19.0	14.0	2.2	0.1	0
Total ..	6.1	6.4	7.9	6.2	7.9	6.2	11.2	22.7	17.0	5.0	2.3	5.0
Tettenhall No. 1 Reservoir												
Number of samples ..	4	4	3	4	5	5	4	5	4	5	4	3
Chlorophyceae ..	0.7	1.3	2.0	2.6	5.0	9.3	7.0	4.7	3.6	1.4	1.2	1.1
Bacillariophyceae ..	21.4	44.0	10.0	10.0	9.4	25.0	6.0	7.8	5.3	4.2	2.7	2.9
Xanthophyta ..	0.8	2.6	2.0	3.0	1.4	0.8	1.8	2.3	1.0	2.0	2.1	0.8
Cyanophyceae ..	0.1	0.3	0.2	0	0.2	0.4	1.3	7.7	8.9	0.6	0	0.1
Total ..	23.0	48.2	14.2	15.6	16.0	35.5	16.0	22.5	19.0	8.0	6.0	5.0
Tettenhall No. 2 Reservoir												
Number of samples ..	4	4	3	4	5	5	4	5	4	5	4	3
Chlorophyceae ..	1.0	1.8	2.6	6.0	10.5	20.0	21.0	10.2	12.0	4.0	2.3	0.5
Bacillariophyceae ..	10.0	11.4	11.0	14.0	12.5	18.5	13.6	9.5	5.2	3.1	2.8	1.4
Xanthophyta ..	1.4	1.8	1.8	2.7	1.2	0.7	1.1	1.5	1.2	2.1	2.3	1.0
Cyanophyceae ..	0	0	0	0.1	0.5	0.1	0.2	6.9	6.6	0.9	0	0.1
Total ..	12.4	15.0	15.4	23.8	24.7	39.3	36.0	28.0	25.0	10.0	7.5	3.0

5.

RADIOLOGICAL EXAMINATIONS

5.1 Sampling Scheme

Daily samples are taken from those water supplies exposed to the atmosphere, viz. the River Worfe at Cosford and the two reservoirs at Tettenhall, and the composite samples examined weekly. Rain water collected at Cosford is also examined.

Sampling continued until the end of July, but accurate results were becoming increasingly difficult to obtain because of the increasing error due to proportionately high background readings. An external lead shield was devised but was not very efficient, so sampling ceased pending improvements to the shielding and re-calibration of the counter.

5.2 Results

Monthly averages of beta-radioactivity in pico-curies per litre.

Month	COSFORD River Worfe		TETTENHALL Reservoirs		RAINFALL
	Total	Other than Potassium	Total	Other than Potassium	Total
January	18	14	7	2	2,900*
February	22	18	9.6	5.2	450
March	22	17	9.2	4.9	980
April	21	16	8.8	4.4	630
May	16	12	8.9	4.7	920
June	9.5	6.2	7.4	3.2	830
July	12	8	6.8	3.1	410
Average (January to July)	17.2	13	8.2	3.9	700

* This abnormally high radioactivity was associated with the month's snowfall and is not included in the average.

In the river and reservoir samples the difference between the total beta-radioactivity and that due to naturally occurring potassium represents activity due partly to other naturally occurring radioactive elements (approximately 2 pico-curies per litre) and partly to radioactive fallout in the atmosphere. The level of beta-radioactivity in both supplies is within the tolerance levels set by the Medical Research Council.

All the activity in the rainfall is due to fallout.

Sewage

I am indebted to Mr. A. F. B. Sidwick, the Borough Engineer and Surveyor for the following report.

The sewage disposal works are situated at Lunt Road, Bilston, and deal with the flow of sewage from the whole of the Borough, together with 1,663 acres of the northern part of the Coseley Urban District and also parts of the adjoining areas of Wolverhampton, Willenhall and Darlaston, a total of 3,588 acres.

The system of disposal is precipitation followed by continuous filtration; the sludge from the tanks gravitates to a well from which it is pumped to lagoons.

The Disposal works were first constructed in 1905. The works were extended in 1924 and again in 1929 to provide additional capacity for the reception and treatment of sewage from a part of the Coseley Urban District which now contains approximately 6,787 houses with numerous industrial and other premises.

All major units of the works are heavily overloaded and schemes for improvements and extensions have been under consideration by the Council.

The Ministry have recently indicated their willingness to consider favourably a scheme for the conveyance of the sewage being dealt with at the Bilston works to new works to be constructed at Willenhall jointly on behalf of the Corporation and the Willenhall Urban District Council.

Public Health Officers' Regulations, 1959

In accordance with Article 25 (20) (S.R.&O.) 1959, No. 962, of the above regulations, the following tabular statement has been submitted by the Chief Public Health Inspector.

(a) INSPECTIONS	1st	Re-	
Nature of Inspection	Inspections	Inspections	Total
Dwelling Houses			
Inspections—Routine	151	89	240
Complaints	334	347	681
Verminous/Dirty Condition ..	14	3	17
Rent Act, 1957	—	6	6
Disinfected	3	—	3
Disinfested	74	—	74
Rodent Control	240	557	797
Infectious Disease	367	707	1074
Disinfestation—Visits	101	9	110
Removals	309	—	309
Slum Clearance	4	9	13
Inspections—Miscellaneous ..	122	10	132
Overcrowding	1	—	1
Other Premises			
Houses let in lodgings	5	4	9
Tents, Vans, Sheds, Sites ..	3	2	5
Factories—Mechanical Power ..	16	—	16
No Power	3	1	4
Workplaces—Ordinary	1	—	1
Outworkers	1	1	2
Slaughterhouses—Inspected ..	7	10	17
Meat Inspection	690	5	695
Public Conveniences	3	—	3
Stables	2	—	2
Premises re Fowl, Swine, etc. ..	2	—	2
Premises re Offensive Accumu- lation	26	28	54
Drains—Inspected	132	75	207
Colour Tested	18	1	19
Water Tested	3	—	3
Grenade Tested	2	—	2
Smoke Tested	5	—	5
Sewers—Inspected	6	4	10
Street Gullies	1	—	1
Smoke Observations	40	2	42
Visits to Plant, etc.	8	2	10
Water Samples—Chemical	2	—	2
Bacteriological	1	—	1

	1st Inspections	2nd Inspections	Total
Smoke Measurement	133	—	133
Pet Animals Act, 1951	13	—	13
Cleansing Visits	8	3	11
Miscellaneous Visits	328	6	334
Rodent Control	50	176	226
Disinfested	5	—	5
Food Hygiene Regulations			
Cafes, Restaurants and Kitchens	3	1	4
Works Canteens and Kitchens ..	1	—	1
School Canteens	3	—	3
Fried Fish Shops	6	2	8
Market—Food Stalls	12	1	13
Visits	23	—	23
Shops—Meat	9	16	25
Food	102	11	113
Mobile	22	—	22
Other Food Stalls and Carts ..	1	—	1
Public Houses	2	—	2
Bakehouses	1	2	3
Ice Cream—			
Manufacturers ..	4	—	4
Samples	65	—	65
Other Foods			
Samples	17	—	17

(b) NOTICES

Informal Notices Issued	170
Informal Notices Complied	192
Statutory Notices—Section 92-93	
Public Health Act, 1936—Issued ..	14
Complied ..	11

Drains and Water Closets

1,287 choked drains and water closets were cleansed by the Health Department Staff.

(c) IMPROVEMENTS MADE AS A RESULT OF THE SERVICE
OF INFORMAL OR STATUTORY NOTICES

Dwelling Houses	By Notice	Without Notice	Total
Internal Rooms			
Old Windows Repaired ..	9	—	9
Window Cords Renewed ..	2	—	2
Dampness in Walls Remedied ..	4	—	4
Plaster of Walls Repaired ..	10	1	11
Plaster of Ceilings Repaired ..	6	1	7
Floors Repaired	5	—	5
Old Fireplaces Repaired ..	3	—	3
Doors Repaired	—	1	1
Staircases			
Steps Provided or Repaired ..	1	—	1
Sculleries and Wash Houses			
Windows Repaired	4	—	4
Window Cords Renewed ..	4	—	4
New Sinks Provided	—	2	2
Waste Pipes Repaired or Renewed	3	—	3
Floors Repaired	2	—	2
Doors Repaired	1	—	1
Plaster of Ceilings Repaired ..	1	—	1
Wash Coppers Provided ..	1	—	1
Cellars			
Drainage Provided	—	1	1
Grating Renewed	1	—	1
External			
Roofs Repaired	38	5	43
Eaves Spouts Repaired or Pro- vided	18	8	26
Down Spouts Repaired or Pro- vided	8	5	13
Walls Repaired and/or Repointed	9	2	11
Chimney Stacks Repaired and/or Repointed	10	—	10
Doors Repaired	2	1	3
Steps Repaired	1	—	1
General			
Yards Paved	1	—	1
Yard Paving or Surfaces Re- paired	6	3	9
Yard Drainage Installed ..	—	3	3

	<i>By Notice</i>	<i>Without Notice</i>	<i>Total</i>
Outbuildings			
Coal Stores			
Roofs Repaired	2	—	2
Doors Repaired	1	—	1
Water Closets			
Roofs Repaired	3	—	3
Walls Replastered	3	—	3
Ceilings Replastered	2	—	2
Walls Repaired or Repointed ..	4	—	4
Doors Repaired	3	—	3
New Cistern Fixed or Repaired	14	11	25
New Pedestals and Seat Repaired or Provided	20	4	24
Soil Pipes Repaired	2	3	5
Water Supply Provided, Pipes Repaired	44	6	50
New Water Closet Provided ..	2	—	2
Floors Repaired	2	—	2
Drains			
Repaired or Relaid	16	7	23
Cleansed	13	6	19
Inspection Chambers Built or Repaired	10	5	15
Self Cleansing Gullies Provided	3	—	3
Cesspools			
Repaired	1	—	1
Ashbins			
Renewals	—	627	627
Provided for New Houses ..	—	108	108
“ “ Other Premises ..	—	1	1
Bin Sales	—	31	31
Sewers and/or Street Gullies			
Repaired	—	1	1
Offensive Accumulations			
Removed	1	6	7
Smoke Observation			
Additions to Plant or Improve- ments	—	1	1

	<i>By Notice</i>	<i>Without Notice</i>	<i>Total</i>
Houses Let In Lodgings			
Cleansed or Limewashed ..	—	1	1
Other Improvements	—	1	1
Food Shops			
Improvements under Food Hy- giene Regulations	12	4	16
Shops			
Improvements under Shops Acts	—	4	4
Other Food Premises			
Structural Improvements ..	5	—	5
Hot and/or Cold Water Provided or Improved	3	—	3
Other Improvements	5	—	5

Disinfestation

74 houses and 5 other premises were disinfested. Treatment was by fumigant smoke or insecticide sprays.

In addition there were 309 removals, the tenant's effects and furniture being treated by HCN gas and the bedding sterilised in the steam disinfecter.

Rodent Control

The total number of complaints received during the year was 271—37 more than last year. 1,023 visits were made for the treatment of premises, besides the regular treatments carried out on waste land, brook courses, etc.

CLEANSING

The Cleansing Superintendent, Mr. J. R. Tart, M.A.P.H.I., reports as follows:—

REFUSE COLLECTION AND DISPOSAL

PERIOD 1ST APRIL, 1963, TO 31ST MARCH, 1964

That there is nothing untoward to report on the collection side this year is a reason for satisfaction, signifying as it does, that the work continued satisfactorily without complaint from the public, other than in the case of the odd household here and there who found that the collection of their bin had been missed. This was usually due to locked gates, holidays, or similar circumstances preventing the men obtaining access to the bin.

The bulk of refuse still continues to increase, though without significant increase in weight. One begins to wonder whether in a few years time it will be necessary to increase the size of the standard bin in order to contain this additional bulk of packaging material. At the present, however, there is no need for a change.

That bugbear of many Cleansing Departments, absenteeism and high turnover of the labour force, left Bilston relatively untouched during the year, a circumstance ascribable I think to the practical and satisfactory Bonus Incentive Scheme.

I should like to take this opportunity for thanking the Foreman, Mr. Thompson, and Mr. Littlewood and all the men for a good year's work for which the ratepayers can truly be grateful. As I have said in previous years, if refuse collection continues satisfactorily, these essential workers go unrecognised, but if the work should fall behind and the bins commence to overflow, then the housewife begins to realise how much waste material she accumulates. After telephoning the Depot with her indignant complaint, one hopes she does a simple mental sum and realises her annual output of unpleasant unwanted material and gives thanks for the normally efficient and inconspicuous work of the refuse collectors.

TABLE 1

Vehicle Description	Date Purchased	Total Mileage	Mileage 1963-1964	Galls. Fuel Used	M.P.G.
URE 962 S.D. 12 cu. yd. SIDE LOADER	October, 1950	54,301	2,200	534	4.12
XRE 939 S.D. 16 cu. yd. 'FORE & AFT' REAR LOADER	July, 1952	48,451	4,142	1,220	3.39
980 ARF KARRIER 7 cu. yd. SIDE LOADER	January, 1954	41,117	4,954	562	8.81
8443 RE KARRIER 18 cu. yd. 'DUAL TIP' REAR LOADER	February, 1960	19,642	5,012	589	8.51
488 EBF KARRIER 25 cu. yd. 'DUAL TIP' REAR LOADER	June, 1962	8,562	5,101	533	9.57
761 EBF KARRIER 25 cu. yd. 'DUAL TIP' REAR LOADER	July, 1962	8,190	4,813	645	7.46

TABLE 2
HOUSE REFUSE—DRY

Receptacles Emptied	Loads Removed	Estimated Tonnage
548,505	2,709	8,362

TABLE 3
MISCELLANEOUS REFUSE REMOVED

Trade Refuse	Waste Paper	Total
Tons	Tons	Tons
202	116	318

Salvage

Collection figures are given below :—

TABLE 4

MATERIALS	1963-64			1962-63		
	Weight		Value	Weight		Value
	Tons	Cwts.	£	Tons	Cwts.	£
Paper	116	4	995	74	16	621
Scrap Metal	—	—	—	—	—	—
	116	4	995	74	16	621

Disposal

The completion of Dudley Street Tip necessitated bringing into use low-lying useless waterlogged land at Stowheath. As this land was within sight of householders in Wolverhampton and Willenhall it was anticipated that the greatest care would need to be exercised in the management of the tip. One of the chief causes of trouble at refuse tips is interference with the tipped and covered material by children and 'tatters', who usually add fire raising to their other deprecations. To prevent this, an expensive and substantial fence was erected. However, the spirit of the day brooks nothing of such indications of private or public ownership and the fence was cut and disturbed on a number of occasions, and fires, sometimes serious and always expensive to control, occurred. One result has been a charge upon the rates in the form of a watchman.

The increasing bulk of present day refuse, mentioned in my few words on refuse collection, manifests itself most obviously at the refuse disposal point, and has resulted in the need for two extensions of the tip in the twelve months. This looks as though the five to seven years estimated life of the tip will be halved. However, as decomposition of the

cellulose content proceeds, the land should settle and permit of the spreading of another layer of material. The soil on the site which it was hoped to use for covering material has proved unsatisfactory, consisting as it does of the local 'tocky dirt' which promotes wheel spin in the collection vehicles and carries on to the road surface. Use is made of such ash and shale as may be found on site, but the bulk of the covering material has to be imported as foundry sand and builders rubble. This helps to shorten the life of the tip. It is to be regretted that the original idea of 'cut, stockpile, tip, and cover' has proved impracticable.

TABLE 5
STOWHEATH LANE TIP

	Cleansing Department		Tradespeople and Others		TOTAL	
	Loads	Tons	Loads	Tons	Loads	Tons
House Refuse—Dry ..	2709	8362	Nil	Nil	2709	8362
Trade Refuse	160	202	169	85	329	287
TOTALS ..	2869	8564	169	85	3038	8649

Total refuse disposed of was 8,649 tons as compared with 7,708 tons last year.

Operational Statistics

Area (statute acres)	1,871 acres
Population at 30th June, 1963 (Registrar General's Estimate)	33,300 persons
Total refuse collected (tons)	8,680 tons
Weight (cwts.) per 1,000 population per day (365 days to year)	14.25 cwts.
Number of premises from which refuse is collected	9,890
Premises from which collection is made at least once weekly	99% of total
Average haul (miles) by collection vehicle to dis- posal point (single journey)	2 miles
Kerbside collection, if practised, expressed as es- timated percentage of total collection	Nil
Total refuse disposed of	8,649 tons
Method of disposal—Controlled tipping	100%

Analysis of income and tonnage :—

					<i>Income</i>	<i>Tonnage</i>
					£	Tons
Scrap Metal	..	..	..	..	—	—
Waste Paper	..	..	..	..	995	116
					—	—
					995	116
					—	—
Trade Refuse	..	..	..	..	413	287

Caravans and Moveable Dwellings

5 visits were made to various sites in the Borough for the inspection of caravans occupied by gypsies and other wanderers.

ATMOSPHERIC POLLUTION

VOLUMETRIC RECORDER

This instrument records the daily mean concentrations of smoke and sulphur dioxide in the atmosphere. The results were as follows:—

<i>Month</i>		<i>SMOKE</i> <i>microgms/cu.m.</i>	<i>SO₂</i> <i>microgms/cu.m.</i>
January	Lowest result	74	54
	Highest "	1062	100
February	Lowest "	69	73
	Highest "	231	245
March	Lowest "	43	39
	Highest "	187	193
April	Lowest "	30	20
	Highest "	144	116
May	Lowest "	20	10
	Highest "	77	97
June	Lowest "	12	18
	Highest "	66	138
July	Lowest "	10	32
	Highest "	87	92
August	Lowest "	7	13
	Highest "	83	143
September	Lowest "	14	9
	Highest "	158	108
October	Lowest "	20	18
	Highest "	139	101
November	Lowest "	25	15
	Highest "	249	174
December	Lowest "	42	16
	Highest "	483	420

LEAD PEROXIDE CYLINDERS

Mgs. of SO₃ per day collected by 100 sq. cm. of Batch 'G' PbO₂

Station	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Library ..	4.46	4.62	2.38	1.81	2.04	0.89 No Sample	0.75	0.71	1.10	1.60	2.23	3.03
Hickman Park ..	4.17	4.59	2.59	2.09	0.87	0.65	0.93	0.58	1.38	1.96	2.79	3.57
Wellington Road ..	3.57	3.10	1.98	1.58	0.95		0.51	0.58	1.00	1.44	1.97	3.75
Ettingshall Road ..	3.78	4.29	1.98	1.80	1.26 No Sample	0.76 No Sample	0.53 No Sample	0.49 No Sample	0.80	1.07	1.85	3.55 No Sample
Vicarage, Bradley ..	4.67	4.80	2.40	1.22	1.40	0.86	0.76	0.88	0.87	1.27	1.94	3.24 No Sample
Moxley Hospital ..	4.18	4.71	2.47	1.82					1.18	1.60	2.17	
Fire Station ..	11.50	8.42	4.98	5.68	2.96	1.72	1.28	1.50	2.40	2.34	3.36 No Sample	3.57
Lunt Road Depot ..	5.45	5.92	3.46	2.57	1.70	1.58	1.13 No Sample	1.27	1.73	2.50		
Freeman Place ..	4.34	4.66	2.18	1.71	1.52	0.98	1.04	0.63	0.95	1.37	2.01	3.53
Centre Health Clinic...	4.91	4.28	2.98	2.32	0.41	1.33		0.93	1.57	2.03	2.70	3.06
Tomhill Waterworks...	2.79	2.96	0.98	1.04	1.03	0.59	0.27	0.28	0.44	0.51	0.86	3.42

WEIGHT OF CARCASE MEAT AND OFFAL CONDEMNED IN

DISEASE	Carcase and Organs <i>T. C. Lbs.</i>	Heads and Collars <i>T. C. Lbs.</i>	Lungs <i>T. C. Lbs.</i>	Hearts <i>T. C. Lbs.</i>	Livers <i>T. C. Lbs.</i>	Stomach and Intestines <i>T. C. Lbs.</i>
Abscesses		5 16	21		3 2	1 38
Actino Bacillosis		20				
Arthritis						
Ascarides Lumbricoides ..					1 9 85	
Blood Splash .. .				1		
Bruising						
Cirrhosis					8 26	
Contamination		9			6½	42
Distomatosis					108	
Echinococci			28		7 101½	
Emaciation (Pathological)	3 41					
Emphysema						14
Endocarditis				1½		
Enteritis						12
Erysipelas (Swine) Acute ..	2 98					
Fatty Degeneration ..				1	2 16	
Fatty Infiltration .. .					4	
Haematoma						
Hydronephrosis						
Infarcts						
Melanosia						
Necrosis						
Nephritis						
Oedema	1 109					
Pericarditis				5 26		
Pericarditis (Septic) ..				1		
Peritonitis					2 16 86	19 99
Peritonitis (Sep.) Acute Diff.	5 102					
Petechiae						
Pleurisy			1 10 104			
Pleurisy (Septic)			6			
Pneumonia			2 10 17			
Pneumonia (Septic) Acute	1 52		41			
Pyæmia	3 18					
Rash						
Retention Cysts						
Strongyli			1 20			
Telangiectasis					2	
Tenuicollis Cysts					28	14
Torsion						
Toxaemia	1 90					
Tuberculosis		7 10 99	40		103	16 32
Tumours (Multiple) ..	98					
Ulceration						
Urticaria						
	1 1 48	7 16 32	4 3 53	5 30½	5 10 8	1 18 27

SLAUGHTERHOUSES AND REASON FOR CONDEMNATION							
Lbs.	Spleens <i>T. C. Lbs.</i>	Omentum <i>T. C. Lbs.</i>	Peritoneums <i>T. C. Lbs.</i>	Parts of Carcases <i>T. C. Lbs.</i>	TOTALS		
					<i>Tons</i>	<i>Cwts.</i>	<i>Lbs.</i>
				3 96		13	61
							20
				1 58		1	58
					1	9	85
				4			5
				3 9		3	9
						8	26
½	2			23			83
							108
		½				8	18
						3	41
							14
							1½
							12
						2	98
	8					2	25
							4
	9½						9¼
35½							35¼
6	49½						55½
				24			24
				1			1
9½							9½
				24		2	21
						5	26
				4			5
	5 66½			1 5 66	5	7	93½
						5	102
19½							19½
				3	1	10	107
				87			93
					2	10	17
						1	93
						3	18
				3			3
12	2						14
						1	20
							2
		3					45
	1½						1½
						1	90
	1			24	8	8	75
							98
				15			15
				1 33		1	33
82½	6 28	3½		1 17 26	22	19	2¾

CARCASSES AND OFFAL INSPECTED AND CONDEMNED IN WHOLE OR PART

	Cattle Exclud- ing Cows	Cows	Calves	Sheep and Lambs	Pigs	Horses
Number killed	462	1	—	1,384	30,319	—
Number inspected	462	1	—	1,384	30,319	—
All diseases except Tuber- culosis and Cysticerci:						
Whole carcasses con- demned	—	—	—	—	24	—
Carcases of which some part or organ was condemned	63	—	—	37	7,263	—
Percentage of the num- ber inspected affected with disease other than tuberculosis and cysticerci	13.64	—	—	2.67	23.95	—
Tuberculosis only:						
Whole carcasses con- demned	—	—	—	—	—	—
Carcases of which some part or organ was con- demned	—	—	—	—	1,512	—
Percentage of the number inspected affected with tuberculosis	—	—	—	—	4.99	—
Cysticerci :						
Carcases of which some part or organ was con- demned	—	—	—	—	—	—
Carcases submitted to treatment by refrigera- tion	—	—	—	—	—	—
Generalised and Totally condemned	—	—	—	—	—	—

CARCASE AND ORGANS

Pathological Emaciation	7
Acute Swine Erysipelas	2
Acute Diffuse Septic Peritonitis	4
Multiple Tumours	1
Toxaemia Associated with Gangrene	1
Oedema and Emaciation	5
Pyaemia	1
Acute Septic Pneumonia	2
T.B. Multiple Abscesses and Extensive Pus Contamination	1
	24

MISCELLANEOUS FOODS CONDEMNED IN SHOPS, CANTEENS, ETC.

<i>Food</i>	<i>Tons</i>	<i>Cwts.</i>	<i>Lbs.</i>	<i>Reason for Condemnation</i>
Bacon and Ham		2	44½	Decomposition. Blown / Decomposition / Mould etc. Damaged / Leaking. Abnormal Odour of Contents. Defrosted / Contaminated.
Tinned Goods		5	26	
Frozen Foods		3	38 24	
Fresh Meat	22	11 19	20½ 2¾	See Table.
	23	10	23½	

Food Sampling

The sampling of milk and food under the Food and Drugs Act, 1955, is undertaken by the County Council who are the Food and Drugs Authority under the Act, Dr. G. Ramage, the County Medical Officer of Health has kindly supplied the following details of samples taken throughout the year.

Milk	T.T.	2
	T.T. (Pasteurised)	5
	Pasteurised	1
	Sterilised	2
		10 <i>All genuine.</i>

General Foods

Number of samples taken ..	91
Number of samples genuine ..	79
Number of samples adulterated	12

Classification

American Cake Mix	Sour Lemons
Lime Jelly Marmalade	Lard
Cod Fillets in Parsley Sauce	Ground Almonds
Sultanas	Chocolate Vermicelli
Margarine	Sliced Green Beans
Salt Cubes	Loganberries in Syrup
Garden Peas	Chocolate Brandy Bottles
Pure Fat	Apricot Jam
Pork Sausages cont. preservative (2 samples)	Lemonade Powder
Cheddar Cheese	Strawberry Jam
Danish Butter	Beef Sausage cont. preservative
Corn Flour	Tomato Juice
Blackcurrant Jam	Puff Cracknels
Cultivated Blackberries in syrup	Lemon Squash
Sardines in Oil	Irish Stew
Almond Flavouring	Corned Beef
Black Treacle	Beef Suet with Flour
Mixed Fruit Jam	Ice Cream
Fruit Lolly	Rieta Lolly
Pork Sausage (2 samples)	Chopped Ham
Parsley and Thyme Stuffing	Calamine Lotion B.P.
Butter	Lemon Kali
Creamed Rice Milk Pudding	Butter Scones
Butter Beans	Tinda Halves
Patra Patrel	Spinach
Papri Surti	Potted Beef with Butter
T.T. Milk	Top of the Milk
T.T. Milk Pasteurised	Canadian Healing Oil
Jersey T.T. Milk	Guava Jelly
Milk	Ground Nut Oil
Banana Syrup	Coconut Macaroons
Hot Pepper Sauce	Epsom Salts B.P.
Superfine Ghee	Friars Balsam
Vegetable Ghee	Almond Oil
Slimmers Sugar	Spirit of Camphor B.P.
Breadsticks	Liquid Paraffin B.P.
Stewed Steak and Kidney with Gravy	Eucalyptus Oil B.P.
Creamy Jersey Toffees	Wintergreen Ointment
Gherkins	Glycerin B.P.
Shandy (3 samples)	St. Vincent Arrowroot
Butter Sultana Cokkies	Ammoniated Tincture of Quinne B.P.C.
Walnut Sandwich	Soluble Aspirin Tablets B.P.
Chicken Supreme	Flowers of Sulphur B.P.
English Steak in rich Gravy	

Particulars of Adulterated Samples

19 C/D—PORK SAUSAGE—FORMAL Containing undeclared preservative.	<i>Notice now being exhibited.</i>
22 C/D—CREAMED RICE MILK PUDDING Containing an excessive amount of water.	<i>Manufacture discontinued.</i>
26 C/D—GROUND ALMONDS—FORMAL Has a low Mineral Ash content and so strongly flavoured with Almond as to raise a presumption that it contained added Almond Essence.	<i>Formal samples to be taken.</i>
78 C/E—TINDA HALVES—INFORMAL Not bearing a list of ingredients.	<i>No action by this Authority as firm were being prosecuted by London County Council over this product.</i>
79 C/E—SPINACH—INFORMAL Not bearing a list of ingredients.	<i>Matter taken up with packer by Importer.</i>
80 C/E—PATRA PATREL—INFORMAL Not bearing a list of ingredients.	<i>No action by this Authority as firm were being prosecuted by London County Council over this product.</i>
81 C/E—PAPRI SURTI—INFORMAL Not bearing a list of ingredients.	<i>Matter taken up with packer by Importer.</i>
20 C/G—STEWED STEAK & KIDNEY WITH GRAVY 10.9% deficient of its proper proportion of meat.	<i>Awaits decision of Food Standards Committee.</i>
23 C/G—SHANDY—INFORMAL Deficient of alcohol, contained only 0.70% Proof Spirit.	<i>Investigations still proceeding.</i>
16 C/H—SHANDY—FORMAL Deficient of alcohol, contained only 0.80% Proof Spirit.	<i>Investigations still proceeding.</i>
17 C/H—SHANDY—FORMAL Deficient of alcohol, contained only 0.78% Proof Spirit.	<i>Investigations still proceeding.</i>
88 C/G—EPSOM SALTS. B.P. INFORMAL Not of the quality demanded.	<i>Formal sample taken. Investigations proceeding.</i>

Food and Drugs Act, 1955

Food Hygiene (General) Regulations, 1960

The number of food shops and food preparing premises are as follows :—

Cafes, Snack Bars, etc.	..	..	..	12
Butchers	..	..	..	32
Bakers	..	..	..	5
Ice Cream Manufacturers	..	..	..	2
Sweet Manufacturers	..	..	..	1
Fried Fish Shops	..	..	..	14
Grocers, Greengrocers and General Shops				206
Slaughterhouses	..	..	..	2
Public Houses	..	..	..	89

A total of 300 visits were made to these premises of which 40 were to those preparing food. 33 improvements were effected and a number of improvements of a structural nature are in progress.

Ice Cream

The number of premises and mobile vans selling ice-cream products was 113.

A total of 65 samples were taken and submitted to the Public Health Laboratory the results being as follows:—

Grade 1	..	..	49
Grade 2	..	..	3
Grade 3	..	..	6
Grade 4	..	..	7

